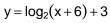
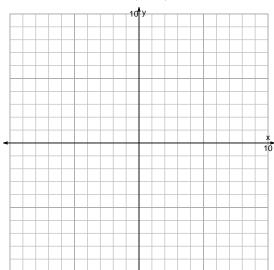
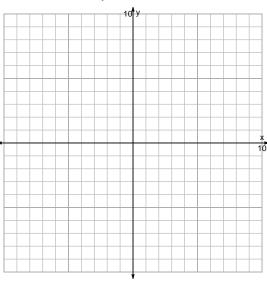
s18quiz: EXP LOG (QUIZ v253)

1. Graph  $y = \log_2(x+6) + 3$  and  $y = 2^{x-4} - 5$  on the grids below. Also, draw any asymptotes with dotted lines.





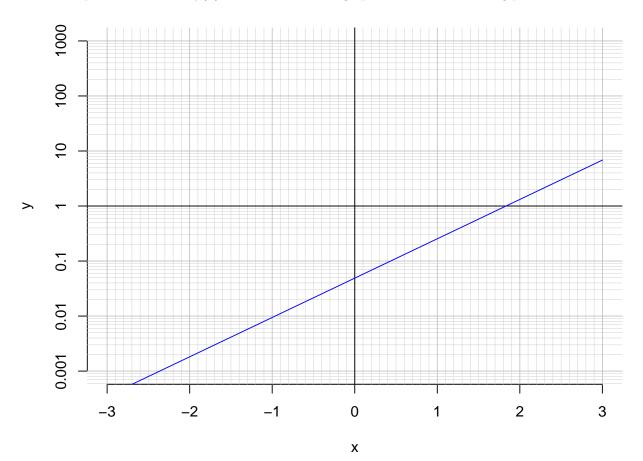
$$y = 2^{x-4} - 5$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-17 = \left(\frac{-4}{5}\right) \cdot 10^{7t/3}$$

3. An exponential function  $f(x) = 0.0489 \cdot e^{1.65x}$  is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(2.5).

- b. Express  $f^{-1}(x)$ , the inverse of f.
- c. Using the plot above, evaluate  $f^{-1}(0.008)$ .